

We claim:

1. Material formed from SAP and fibers that is obtainable by pressing at not less than 60°C and not less than 3 bar.
2. Materials as claimed in claim 1 that are obtainable by pressing at not less than 70°C.
3. Materials as claimed in claim 1 that are obtainable by pressing at not less than 80°C.
4. Materials as claimed in any of claims 1 to 3 that are obtainable by pressing at not less than 5 bar.
5. Materials as claimed in any of claims 1 to 3 that are obtainable by pressing at not less than 10 bar.
6. Material as claimed in any of claims 1 to 5 that expands not less than 5-fold in one dimension and by less than 20% in the other two dimensions on addition of water.
7. Material formed from SAP and fibers that expands not less than 5-fold in one dimension and by less than 20% in the other two dimensions on addition of water.
8. Material as claimed in any of claims 1 to 7 that expands not less than 10-fold in one dimension and by less than 10% in the other two dimensions on addition of water.
9. Material as claimed in any of claims 1 to 8 that is obtainable by in situ polymerization of the SAP.
10. Material as claimed in any of claims 1 to 9 that has a density in the range from not less than 0.5 g/ccm to 1.2 g/ccm.
11. Material as claimed in any of claims 1 to 10 where the ratio of teabag to retention in 0.9% NaCl solution is greater than 2.
12. Material as claimed in any of claims 1 to 11 where the retention in 0.9% NaCl solution is greater than 3 g/ccm.
13. Material as claimed in any of claims 1 to 12 where the increase in thickness 60 days after compression is less than 100% based on the thickness directly after compression.
14. Material as claimed in any of claims 1 to 13 where the FSEV after 60 seconds is at least

double that of the uncompressed material.

- 5 15. Material as claimed in any of claims 1 to 14 where the FSEV after 2 minutes is at least 60% higher than that of the uncompressed material.
- 10 16. Material as claimed in any of claims 1 to 15 where the EVUL after 60 seconds is at least double that of the uncompressed material.
17. Material as claimed in any of claims 1 to 16 where the EVUL after 2 minutes is at least 60% higher than that of the uncompressed material.
18. Material as claimed in any of claims 1 to 17 where the AAP (0.7 psi) in 0.9% NaCl solution is greater than 5 g/ccm.
- 15 19. Laminates comprising material as claimed in any of claims 1 to 18.
- 20 20. The use of material and laminate material as claimed in any of claims 1 to 19 to absorb water vapor.
21. The use of material and laminate material as claimed in any of claims 1 to 19 to absorb water or aqueous fluid, especially body fluid.
22. The process for producing compressed material comprising SAP and fiber by pressing at above 60°C and above 3 bar.